

ETHYL CORP.
Ferndale MI

New file

Suite 1501, Northbrook Office Court
666 West Dundee Road, Northbrook, IL 60062 • (312) 498-9094TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-6669

Mr. Michael Strimbu, Deputy Project Officer October 16, 1986
Waste Management Division
Emergency Response Section
U.S. Environmental Protection Agency
11th Floor
230 South Dearborn Street
Chicago, Illinois 60604

TAT-05-F-01151

Reference: Ethyl Corporation
TDD# 5-8610-50 (FY 1987)
TDD #5-8606-21 (FY 1986)

Dear Mr. Strimbu:

On June 27, 1986 the Technical Assistance Team (TAT) was tasked by the U.S. Environmental Protection Agency (U.S. EPA), Region V, to gather background information from State, County and local agencies on the Ethyl Corporation, Ferndale, Michigan, (Figure 1) and to conduct an assessment of the facility. The investigation was initiated by the U.S. EPA to pursuant to a Hot Line call alleging that landfilling of hazardous material had occurred in the past at the Ethyl Corporation facility (Hot Line Case #476).

TAT members Robert McLeod and Mary Adams initially visited Ethyl Corporation on July 14 at 1300 hours. The facility was closed, therefore, no entry was made. A guard at the entrance to the facility supplied the TAT with the names of two company officials, Mr. John Snow, Manager of Corporate Real Estate, Richmond, Virginia and Mr. C.E. Colvin III, of the Ethyl Corporation's Office of Health and Environment; Baton Rouge, Louisiana, to whom questions regarding history of company operations could be directed. The TAT further learned from the guard that the Michigan Department of Natural Resources (MDNR) was presently investigating the facility.

The following day, the TAT contacted the MDNR Ground Water Quality Division (GWQD) to inquire as to the status of the MDNR's investigation of Ethyl Corporation. The TAT spoke with Michael Czuprenski, on July 15, 1986. Mr. Czuprenski informed the TAT that Ethyl Corporation has been extremely cooperative with the MDNR and that Ms. Virginia LoSelle from his office is conducting the MDNR investigation.

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Roy F. Weston, Inc.

SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

In Association with ICF Inc., Jacobs Engineering Group Inc., C.C. Johnson & Associates, Inc., and Tetra Tech, Inc.,

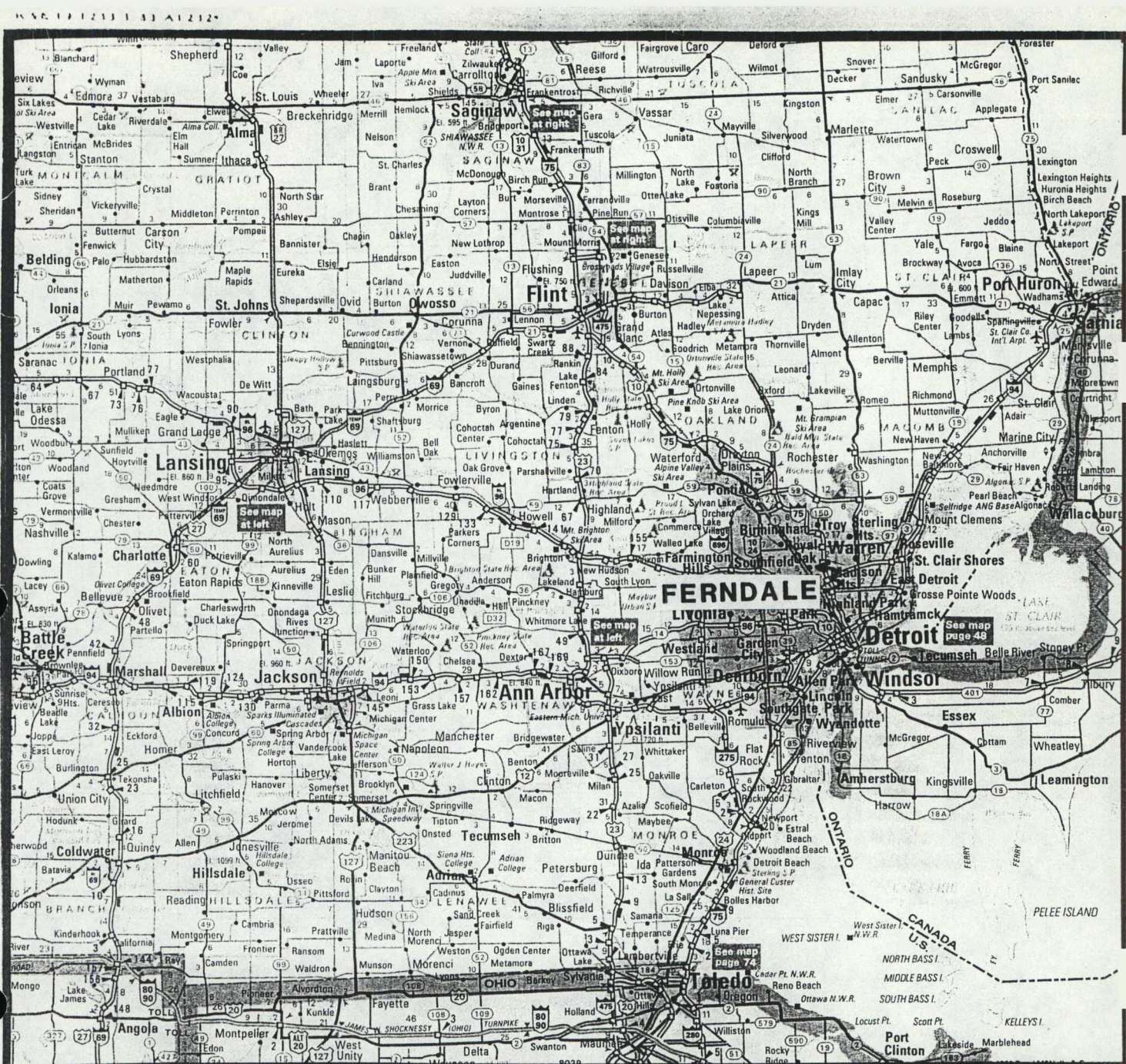


FIGURE 1. SITE LOCATION

**ETHYL CORPORATION,
FERNDAL, MICHIGAN**



SCALE: 20 MILES



ROY F. WESTON, INC.

WESTON
ENVIRONMENTAL CONSULTANTS-DESIGNERS

DRAWN D. Fletcher	DATE 10-10-86	DES. ENG.	DATE	TED NO. 5-9606-21
CHECKED		APPROVED		PCS NO. 5250

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Ms. LoSelle was unavailable for consultation until July 28, at which time she returned a call to TAT member Adams. The following report summarizes the background information compiled by the TAT from MDNR GWQD files, interviews with Ms. LoSelle, Mr. John Snow and Mr. C. E. Colvin, III.

The Ethyl Corporation facility is located at 1600 West Eight Mile Road, Ferndale, in Oakland County, Michigan. Ethyl Corporation actively occupied the site from 1936 until 1983. Ethyl Corporation was involved in the research and development of high performance gasoline mixtures which entailed the testing of various chemical additives. The facility's laboratory had an Interim Status Permit to store hazardous waste under the Resource Conservation and Recovery Act (RCRA), License #MID041803123. The facility was certified closed in February 1984, in accordance with a closure plan approved by the U.S. EPA, Region V.

The site comprises a total of 34 acres of which 25 are developed. The main office and laboratory buildings are located at the southern end of the facility. The additives tested at the facility included tetra ethyl lead, ethylene dibromide, and ethylene dichloride. These additives would arrive at the facility in drum lots and then be mixed in gasoline before dynamometer studies were conducted. According to Mr. C.E. Colvin III, the drums were emptied and then returned to the manufacturer. Mr. Colvin also stated that company research chemists and engineers were warned to always exercise caution in handling any leaded compounds. Preblended gasolines were also used in the dynamometer studies. Over 70 underground fuel storage tanks utilized by the company were excavated and removed at closure.

Pursuant to the U.S. EPA's decision to phase out leaded gasoline, Ethyl Corporation suspended their automotive gasoline mixtures research program. A consolidation of Ethyl Corporation's research operations took place in 1984 with staff from the Ferndale facility being transferred to offices in Baton Rouge, Louisiana.

In 1985, Ethyl Corporation offered to donate their Ferndale facility to Oakland County. Oakland County would not accept transfer of the property until an environmental audit of the facility had been performed. Oakland County therefore engaged the services of the consulting hydrogeological firm of Neyer, Tiseo and Hindo (NTH) of Farmington Hills, Michigan, in December

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1985, to perform an environmental audit and hydrogeological investigation of the facility.

The 12 day investigation by NTH included a magnetometer survey and sampling of five groundwater monitoring wells installed in 1983 by Ethyl Corporation as part of the closure program for the facility. The monitoring wells had been installed in the vicinity of a pit that had been used for disposal of general laboratory chemicals, glassware and residues. The burial of laboratory chemicals, glassware and residues in hand dug pits had been a common practice by Ethyl Corporation.

Volatile Organic Scan Analysis by gas chromatography performed by Clow Hydro Research Services Laboratory of the monitoring well samples tentatively identified the presence of low levels of chloroform, tetrahydrofuran (THF), and toluene in some or all the samples. Estimated levels of between 1 to 5 parts per billion (ppb) of chloroform were found in two of the well samples. THF was found in samples collected from five of the wells; the estimated concentrations ranged from 40 to 400 ppb in these samples. One to 5 ppb toluene was found in only one well sample.

The NTH report indicated that a problem of subsurface contamination of the soils and ground water could possibly exist at the Ethyl Corporation facility. This finding was based in part on the monitoring well data and on information obtained from the magnetometer survey which indicated the apparent presence of ferrous-bearing materials buried at the site. NTH also recommended that further hydrogeologic work be performed at the site.

Oakland County declined to accept the property in late December 1985 and in early January of 1986, a copy of the NTH report was forwarded to the MDNR by officials from the Oakland County Health Department. The facility is presently offered for sale by Ethyl Corporation.

Ethyl Corporation is critical of the NTH study, contending that since PVC piping was used in the construction of the wells, the suspected contamination of the groundwater with THF may be attributable to the adhesive glue used in joining lengths of the PVC pipe. Ethyl Corporation further asserts that the levels of chloroform and toluene do not denote any significant hazard. Ethyl Corporation also questions the validity of the magnetometer data, believing some of the reported anomalies are attributable to power lines located near the areas surveyed.

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The NTH report was reviewed by the Remedial Action Section (RAS) of the MDNR Ground Water Quality Division (GWQD) in January 1986. The RAS intends to conduct a site assessment of the Ethyl Corporation facility in the near future but has not, at the time of this report, scheduled the assessment. Once the assessment has been performed and the site assigned a Michigan Site Assessment Score (MSAS), the site will receive consideration for placement on the Michigan Environmental Protection Act (MEPA 307) List. If the site receives a sufficiently high enough score and is ranked on the MEPA List, it will be eligible for funding from the State of Michigan for remedial action.

Virginia LoSelle, geologist with the MDNR-GWQD's Northville office, reported in a conversation to TAT member Adams on July 28, 1986 that Ethyl Corporation was being fully cooperative with the MDNR in its investigation of the Ferndale facility. Ethyl Corporation has agreed to undertake and implement further studies upon the MDNR's recommendation, including in-depth hydrogeological studies and a gas/soil survey of areas where underground storage tanks had been buried.

Ethyl Corporation has also agreed to perform exploratory digging in areas requested by the MDNR. It is Ethyl Corporation's desire, as stated by Mr. Colvin, to avoid having the MDNR conduct a site assessment of the facility because of the attendant possibility such an assessment could result in the site being placed on the MEPA 307 List. Mr. Colvin also indicated to the TAT that it is Ethyl Corporation's intention to undertake any corrective actions the MDNR may deem necessary in the future.

Because of the cooperation Ethyl Corporation has shown thus far with the MDNR, Virginia LoSelle believes that involvement by the U.S. EPA in the investigation of the Ethyl Corporation's Ferndale facility is not, at present, necessary. The MDNR is directing and overseeing the course of the Ethyl Corporation's investigation into the suspected problem of subsurface contamination at the facility and to date, are well satisfied with the owner's efforts.

During a project status report to U.S. EPA, Mr. Briand Wu, Acting Deputy Project Officer, stated that if the MDNR is conducting an investigation of a site also under investigation by the TAT, an offer of assistance should be made. If EPA involvement is not



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seen as necessary by the MDNR, then no further investigation by the TAT is required.

This letter report, therefore, concludes, and closes the Ethyl Corporation site assessment.

If you have any questions or require additional information, please feel free to contact us.

Sincerely yours,

ROY F. WESTON, INC.

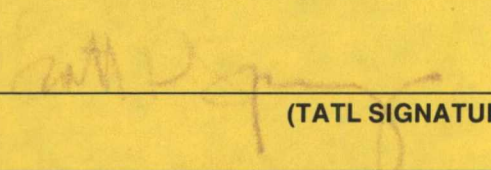
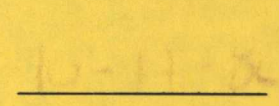
A handwritten signature in cursive script, appearing to read "Mary C. Adams".

Mary C. Adams
Environmental Scientist

A handwritten signature in cursive script, appearing to read "Scott D. Springer".

Scott D. Springer
Technical Assistance Team
Leader, Region V

MCA:amp

1. COST CENTER: <div style="text-align: center; color: red;">V</div>	ACKNOWLEDGEMENT OF COMPLETION FOR TDD TAT EMERGENCY RESPONSE, REMOVAL AND PREVENTION ROY F. WESTON, INC. 6030	2. NO.: 3-8610-30 <input type="checkbox"/> COMPLETE <input type="checkbox"/> INTERIM
3. RESPONSE: Please find submitted herewith a letter report summarizing the information obtained by the Technical Assistance Team on the Ethyl Corporation, Ferndale, Michigan.		<input type="checkbox"/> FORMAL REPORT <input type="checkbox"/> LETTER REPORT <input type="checkbox"/> FORMAL BRIEFING <input type="checkbox"/> OTHER (SPECIFY)
3A. COST TO DATE: \$50.80 DATE: 10/17/1984 3B. TOTAL COST TO CLOSURE: _____		3C. ACTUAL TOTAL HOURS: _____
4. DPO ACTION: <input type="checkbox"/> ACCEPTED <input type="checkbox"/> ACCEPTED WITH EXCEPTIONS <input type="checkbox"/> REJECTED		
5. COMMENTS: _____ Costs incurred in TDD# 3-8606-21 = \$1335.97		
6. I CERTIFY THAT THE ATTACHED MATERIALS MEET AND COMPLY WITH ALL REQUIREMENTS OF THE SUBJECT TDD. <div style="text-align: center;">  (TATL SIGNATURE) </div>		7. DATE: <div style="text-align: center;">  </div>
8. I ACKNOWLEDGE THAT I HAVE BEEN PROVIDED WITH THE MATERIALS AND SERVICES SPECIFIED IN THE SUBJECT TDD WITHIN ITS ORIGINAL OR REVISED TIME FRAMES. <div style="text-align: center;"> _____ (AUTHORIZING DPO SIGNATURE) </div>		9. DATE: _____